

ABSTRACT

A DEVICE AND A METHOD FOR DETERMINING ROUTING PATHS IN A COMMUNICATION NETWORK IN THE PRESENCE OF SELECTION ATTRIBUTES

A device (D) for determining data routing paths in a communication network including a multiplicity of nodes (N_n) includes processing means (M) adapted i) to ensure that at least a portion of said multiplicity of nodes are connected, ii) for said nodes of said portion, to calculate possible paths between a departure node and an arrival node, allowing for at least two chosen criteria, and then to deduce an ideal solution ($Z(\mathcal{R})$) from performances ($Z(r^*)$) of said possible paths (r^*) based on said criteria, iii) to assign each possible path a value of interest allowing for the ideal solution, and then to classify the possible paths allowing for their respective values of interest, and iv) to select from the classified possible paths the k best classified paths, in order to route data via one of said k paths.

(Figure 1)